



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/035,750

10/23/2001

Wade C. Patterson

8213

5036

22922

7590

05/03/2005

REINHART BOERNER VAN DEUREN S.C.
ATTN: LINDA GABRIEL, DOCKET COORDINATOR
1000 NORTH WATER STREET
SUITE 2100
MILWAUKEE, WI 53202

EXAMINER

LI, SHI K

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,750

OK

Applicant(s)

PATTERSON ET AL.

Examiner

Shi K. Li

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p) because the letters of FIGs. 5A, 5B, 5C, 5D, 7I, 8A, 8D are too small and not legible. Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites, "the receiving transmitter and receiving detector is a plurality of receiving transmitters and receiving detectors" in lines 2-3 of the claim. Logically, a receiving transmitter can never be a plurality of receiving transmitters, and a receiving detector can never be a plurality of receiving receivers. Also, it is unclear how the limitation "allowing an optical link between the initiating transmitter and initiating detector and the receiving transmitter and receiving detector", recited in lines 10-12 of claim 1, be interpreted. In particular, it is unclear whether there is an optical link between the initiating transmitter and initiating detector and each receiving transmitter and each receiving detector (point-to-point), or there is an optical link between the initiating transmitter and initiating detector and all receiving transmitters and all

Art Unit: 2633

receiving detectors (point-to-multipoint), or there is an optical link among the initiating transmitter and initiating detector and all receiving transmitters and all receiving detectors (bus), or there is an optical link between the initiating transmitter and initiating detector and one of the receiving transmitters and one of the receiving detectors.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (C. Li et al., "Automatic Fault Detection, Isolation, and Recovery in Transparent All-Optical Networks", Journal of Lightwave Technology, Vol. 15, No. 10, October 1997).

Regarding claim 1 and claim 4, Li et al. discloses in FIG. 5 a point-to-point fiber link between nodes A and B. Inherently, infrared optical signal is used for fiber link communication. If the fiber A→B is cut, both nodes A and B enter the DISCONNECT state. In DISCONNECT state, node B, with receiving transmitter and receiving detector, transmits pulses. When the fiber is repaired, node A, with initiating transmitter and initiating detector, sends pulses (Attention Signal of instant claim). Upon receiving pulses from node A, node B enters STOP state and then RECONNECT state and eventually goes back to ACTIVE state and discontinues transmission of pulses and communication between node A and node B is reestablished.

Art Unit: 2633

Regarding claim 2, Li et al. suggests in FIG. 4 that an optical network includes more than 2 nodes. Therefore, Li et al. teaches a network includes, e.g., node C which comprises second receiving transmitter and second receiving detector.

6. Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Tice et al. (U.S. Patent 6,252,501 B1).

Tice et al. discloses in FIG. 1 a multi-processor system 10 comprising a plurality of units that communicate wirelessly using infrared signals (see col. 3, lines 65-66). Tice et al. illustrates in FIG. 3a, 3b and 3c that the units transmit pulses. Tice et al. teaches in col. 6, lines 37-40 that each unit comprises transmitter and detector. Tice et al. further teaches in col. 6, lines 46-47 that a receiving processor broadcasts error indicator. That is, Tice et al. teaches first processor unit comprising receiving transmitter and receiving detector, second processor unit comprising broadcast transmitter and broadcast detector. The second processor unit transmits pulses. When the second processor unit detects error, it broadcasts an error indicator. The first processor unit detects the error indicator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

skl
18 April 2005



Shi K. Li
Patent Examiner